

a general purpose node electrically connected to the network for providing access through the network, the general purpose node having a wireless communication device;

at least one media device connected to the network; and

b) a portable access unit capable of wirelessly communicating with the general purpose node through the wireless communications device for communicating with the media device through the network,

wherein a user command from the portable access unit is executed by the media device separate from the portable access unit.

2. The system of claim 1, wherein the media device comprises a camera for providing video signals for display on the portable access unit.

3. The system of claim 1, wherein the media device comprises a display for receiving video signals transmitted from the portable access unit for presenting on the display.

4. The system of claim 1, wherein the media device comprises a speaker for receiving audio signals transmitted from the portable access unit for presenting on the speaker.

5. The system of claim 1, wherein the media device is a microphone for transmitting audio signals to the

portable access unit for presenting on a speaker attached to the portable access unit.

b2 6. (Amended) The system of claim 1, wherein the media device comprises a processor.

b3 8. (Amended) The system of claim 6, wherein the processor is for providing commands for controlling remotely controllable hardware.

9. The system of claim 1, wherein the portable access unit further comprises a sensor for transmitting data signals collected by the sensor to the media device.

10. The system of claim 9, wherein the sensor comprises a biological sensor.

11. The system of claim 9, wherein the sensor comprises an environmental sensor.

12. The system of claim 1, wherein the media device comprises a sensor for transmitting signals comprising data collected by the sensor to the local portable access unit.

13. The system of claim 12, wherein the sensor comprises a biological sensor.

14. The system of claim 12, wherein the sensor comprises an environmental sensor.

15. The system of claim 1, wherein the media device is wirelessly connected to the network.

b2 16. The system of claim 1, wherein the media device is electrically connected to the network.

17. The system of claim 1, comprising a plurality of portable access units capable of wirelessly communicating with the general purpose node for communicating with the one or more media devices through the network.

18. The system of claim 17, comprising a plurality of general purpose nodes, each local general purpose node for communicating with a subset of the plurality of portable access units.

19. The system of claim 18, wherein each portable access unit is for dynamically associating and de-associating with one of the plurality of general purpose nodes.

20. The system of claim 19, wherein each portable access unit is adapted for listing on a display the plurality of portable access units that are associated with the plurality of general purpose nodes.

21. The system of claim 19, wherein each portable access unit is adapted for listing on a display the plurality of media devices.

22. The system of claim 21, wherein each portable access unit is adapted to present on the display the biological data for a user of at least one of the other portable access units after selecting the at least one other portable access unit displayed in the list.

23. (Twice Amended) A method for communicating through a network with at least one media device connected to the network, comprising:

providing access to the network with a general purpose node electrically connected to the network, the general purpose node having a wireless communication device;

communicating wirelessly with the remote media device through the general purpose node and the network with a portable access unit that is in wireless communication with the general purpose node;

transmitting a user command from the portable access unit to the media device for controlling the media device; and

executing the user command with a media device separate from the portable access unit.

24. The method of claim 23, further comprising receiving video signals from the media device for providing video signals for display on the portable access unit.

25. The method of claim 23, further comprising transmitting video signals from the portable access unit to the media device for presenting the video signals on the media device.

26. The method of claim 23, further comprising transmitting audio signals from the portable access unit to the media device for presenting the audio signals on the media device.

64 27. (Twice Amended) The method of claim 23, further comprising receiving audio signals captured by the remote media device for presenting on the portable access unit.

29. The method of claim 23, further comprising receiving data captured by a sensor on the media device.

30. The method of claim 23, further comprising dynamically associating and de-associating the portable access unit with the general purpose nodes.

31. The method of claim 30, further comprising presenting a list of a plurality of portable access units on a display that are associated with the general purpose node.

32. The method of claim 31, further comprising listing on the display a plurality of media devices associated with the general purpose node.

33. The method of claim 23, further comprising presenting biological data for a user of one of a plurality of portable access units after selecting the user's name from a list of users of the plurality of portable access units.

34. The system of claim 1, wherein the portable access unit is configured to transmit data.

35. The system of claim 1, wherein the portable access unit is configured to display data.

36. The system of claim 1, wherein the general purpose node is configured to route data between the portable access unit and the at least one media device.

37. The system of claim 36, wherein the general purpose node is configured to route data separate from the portable access unit.

38. The system of claim 1, wherein the media device functions separate from the portable access unit.

39. (Amended) A wireless communications interface system, comprising:

a portable user interface unit secured to a user and having a display, an encoder, a decoder, and a transceiver, said encoder configured to receive a user command and format said user command for transmission by said transceiver over a wireless connection;

a network;

a routing node having a transceiver configured to receive said user command transmitted by said transceiver of said user interface unit through said wireless connection, wherein said routing node establishes a connection to said network; and

a media device coupled to said network, wherein
said routing node transmits said user command to
said media device over said network using said routing node
transceiver,

said media device executes said user command
separate from said user interface unit to generate a
result,

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said routing node directs the result from said
media device, over said network, to said decoder of said
user interface unit through said routing node over said
wireless connection using said routing node transceiver,
and

said decoder is configured to format the result
for presentation to the user with said user interface unit
display.

40. The interface system of claim 39, wherein said
decoder decompresses the result.

41. The interface system of claim 39, wherein said
decoder demultiplexes the result.

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42. (Amended) The interface system of claim 39,
wherein said encoder formats said user command by
compressing said user command.

43. (Amended) The interface system of claim 39,
wherein said encoder formats said user command by
multiplexing said user command.

44. The interface system of claim 39, wherein said network comprises a Local Area Network (LAN).

45. The interface system of claim 39, wherein said network comprises a Remote Local Area Network (RLAN).

46. The interface system of claim 39, wherein said network comprises a Wide Area Network (WAN).

47. The interface system of claim 39, further comprising a sensor associated with the user and configured for communication with said routing node.

48. The interface system of claim 47, wherein said sensor comprises a biological sensor.

49. The interface system of claim 47, wherein said sensor comprises an environmental sensor.

50. (Amended) The interface system of claim 39, further comprising one or more additional portable user interface units, each of said additional data interface units being associated with said routing node through respective transceivers over said wireless connection.

51. (Amended) The interface system of claim 50, wherein one of said user interface units displays a list of the other said user interface units associated with said routing node.

52. The interface system of claim 39, wherein said media device comprises a processor.

53. The interface system of claim 39, wherein said media device comprises a separate computer running client software.

54. The interface system of claim 39, wherein said network device comprises a separate computer running a multimedia Internet software program.

55. (Amended) The interface system of claim 39, wherein said media device comprises a camera for providing video signals over said network, through said routing node, for display on said portable user interface unit.

56. The interface system of claim 39, wherein said media device comprises an Internet phone.

57. (Amended) The interface system of claim 39, wherein said media device comprises a display for receiving video signals transmitted from said portable user interface unit, through said routing node, and over said network to said display for presentation on said display.

58. (Amended) The interface system of claim 39, wherein said media device comprises a speaker for receiving audio signals transmitted from said portable user interface unit, through said routing node, over said network, and to said speaker for presenting sound based on the audio signals.

59. (Amended) The interface system of claim 39, said portable user interface unit further comprising a speaker, wherein said media device comprises a microphone for transmitting audio signals over said network, through said routing node, and to said speaker of said portable user interface unit for presenting sound based on the audio signals.

ba 60. (Amended) The interface system of claim 39, further comprising one or more additional media devices, wherein a media device is selected by a user, and said user command is transmitted from said portable access unit and through said routing node which routes said user command over said network to said selected media device.

61. (Amended) A method of communicating data over a wireless network and displaying the data on a portable user interface unit, the user interface unit being secured to a user and having a display, an encoder, a decoder, and a transceiver, the user interface unit being associated with a routing node that is linked to a media device through a network connection, the method comprising:

receiving a command from the user;

formatting said user command with said encoder into a format suitable for transmission by said transceiver of said user interface unit over said wireless connection;

transmitting said formatted user command from said transceiver to said routing node over said wireless connection;

receiving said transmitted user command from said transceiver, over said wireless connection, and into a transceiver of said routing node;

routing said user command with said routing node to said network device over said network; and

executing said user command with said media device to generate a result,

wherein routing and executing said user command are performed separately from said user interface unit.

b9 62. (Amended) The method of claim 61, wherein formatting said user command with said encoder further comprises compressing said user command.

63. (Amended) The method of claim 61, wherein formatting said user command with said encoder further comprises multiplexing said user command.

64. The method of claim 61, further comprising routing the result from said network device to said routing node over said network.

b10 65. (Amended) The method of claim 64, further comprising routing the result to said decoder of said user interface unit over said wireless connection through respective transceivers.

66. The method of claim 65, further comprising formatting the result with said decoder for presentation to the user with said display.

67. The method of claim 66, wherein formatting the result further comprises decompressing the result.

68. The method of claim 66, wherein formatting the result further comprises demultiplexing the received result.

69. The method of claim 66, further comprising displaying the formatted result on said display to the user.

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70. (Amended) The method of claim 61, wherein routing said user command over said network further comprises routing said user command over a Local Area Network (LAN).

71. (Amended) The method of claim 61, wherein routing said user command over said network further comprises routing said user command over a Remote Local Area Network (RLAN).

72. (Amended) The method of claim 61, wherein routing said user command over said network further comprises routing said user command over a Wide Area Network (WAN).

73. The method of claim 61, further comprising transmitting sensor data to said routing node.